

Abstract

A first and a second longitudinal bias-applying films are formed via a first mask at both sides of a magnetoresistive effective element film so that the difference in surface level between the magnetoresistive effective element film and the first and the second longitudinal bias-applying films is set within ± 20 nm. Then, a first and a second electrode films are formed so as to cover edge portions of the magnetoresistive effective element film and the first and the second longitudinal bias-applying films.